Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims:

1.-5. **(Cancelled)**

6. **(Currently amended)** A method of identifying an agent that activates TSA-responsive Sp3-mediated transcription, the method comprising:

providing a cell having (a) a first vector comprising a first regulatory sequence operably linked to a nucleic acid sequence encoding a fusion protein, wherein the fusion protein comprises (i) a fragment of Sp3 (1) having transcriptional activation activity, (2) comprising at least one glutamine rich region of a TSA responsive domain of Sp3, and (3) lacking at least part of ~~the zinc~~ a Zinc finger region of Sp3, and (ii) a DNA binding domain of a heterologous protein; and (b) a second vector comprising a target binding sequence for the DNA binding domain of the fusion protein operably linked to a reporter gene;

contacting the cell with a test agent; and

selecting a test agent that increases the expression of the reporter gene compared to a control.

7. **(Previously presented)** The method of claim 6, wherein the heterologous protein is not endogenous to the cell.

8. **(Previously presented)** The method of claim 7, wherein the heterologous protein is GAL4, LexA or tetracycline repressor.

9. **(Previously presented)** The method of claim 6, wherein the reporter gene encodes luciferase, chloramphenicol acetyltransferase, beta-galactosidase, human growth hormone or secreted alkaline phosphatase.

10. **(Previously presented)** The method of claim 8, wherein the reporter gene encodes luciferase, chloramphenicol acetyltransferase, beta-galactosidase, human growth hormone or secreted alkaline phosphatase.

11.-13. **(Cancelled)**

14. **(Previously presented)** The method of claim 6, wherein the second vector comprises a second regulatory sequence operably linked to the reporter gene.

15. **(Previously presented)** The method of claim 8, wherein the second vector comprises a second regulatory sequence operably linked to the reporter gene.

16. **(Previously presented)** The method of claim 9, wherein the second vector comprises a second regulatory sequence operably linked to the reporter gene.

17. **(Previously presented)** The method of claim 6, wherein the test agent is a low molecular weight compound.

18.-20. (Canceled)

21. **(Withdrawn)** An anticancer agent comprising a compound that increases the transcriptional activity mediated by Sp3 and a pharmaceutical carrier, wherein the anticancer agent is not TSA, trapoxin, or sodium butyrate.

22. **(Withdrawn)** An anticancer agent identified by the method of claim 6, wherein the anticancer agent is not TSA, trapoxin, or sodium butyrate.

23. **(Withdrawn)** An anticancer agent identified by the method of claim 8, wherein the anticancer agent is not TSA, trapoxin, or sodium butyrate.

24. **(Withdrawn)** An anticancer agent identified by the method of claim 9, wherein the anticancer agent is not TSA, trapoxin, or sodium butyrate.

25.-26. (Canceled)

27. **(Previously presented)** The method of claim 6, wherein the Sp3 is human Sp3.

28. **(Previously presented)** The method of claim 6, wherein the fusion protein comprises at least one of the two glutamine-rich regions comprising amino acids 10-123 or 223-358 of human Sp3.

29. **(Previously presented)** The method of claim 6, wherein the fusion protein lacks at least part of a Zinc finger region selected from the group consisting of amino acids 495-517, 525-547, and 555-575 of human Sp3.